

FIG.1

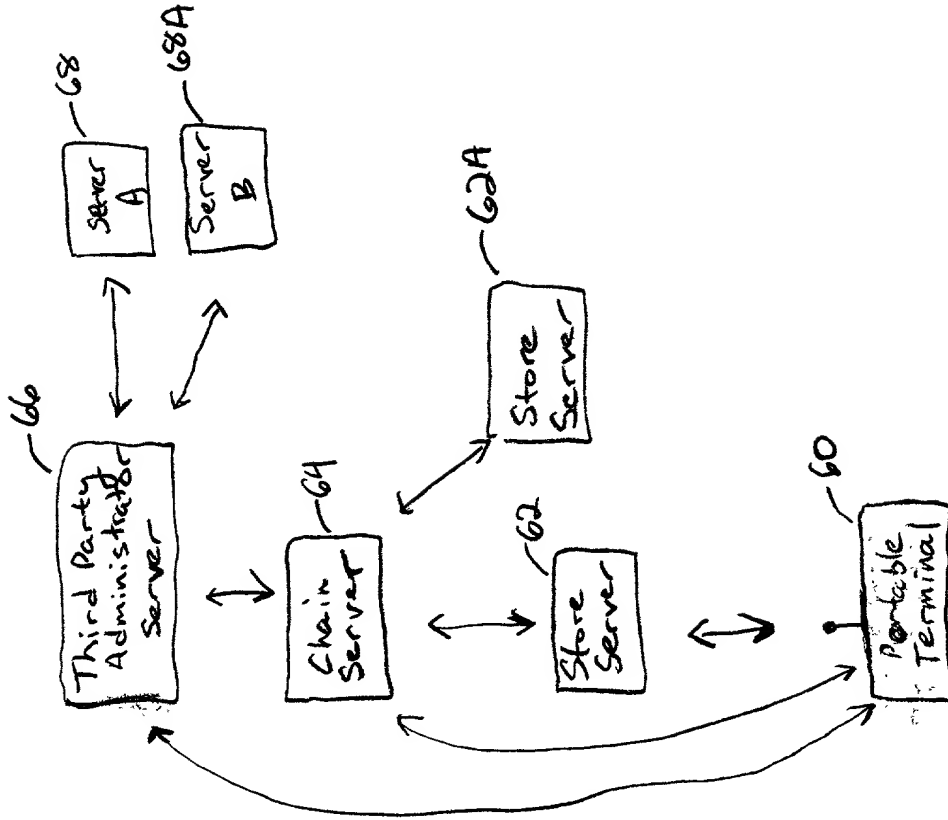


Fig 1A

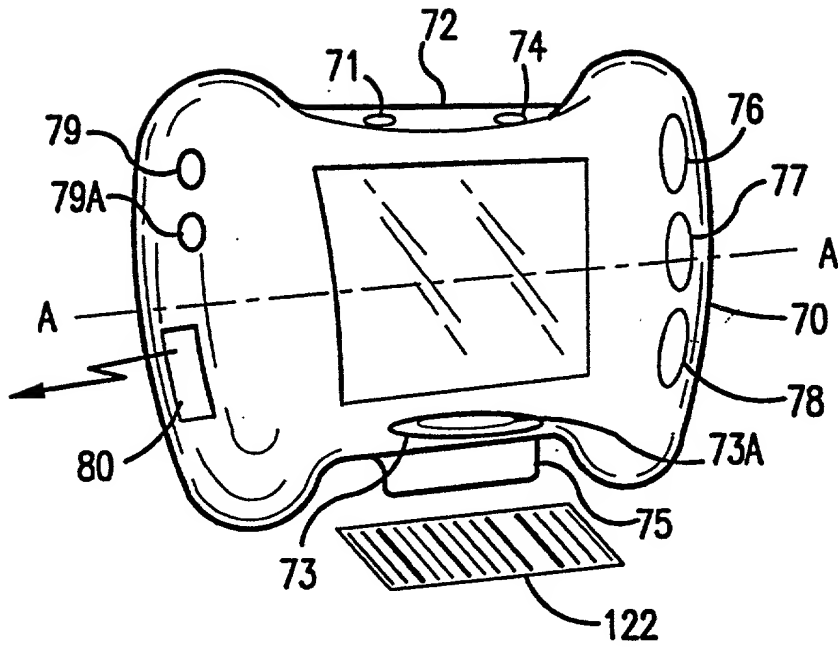


FIG. 2

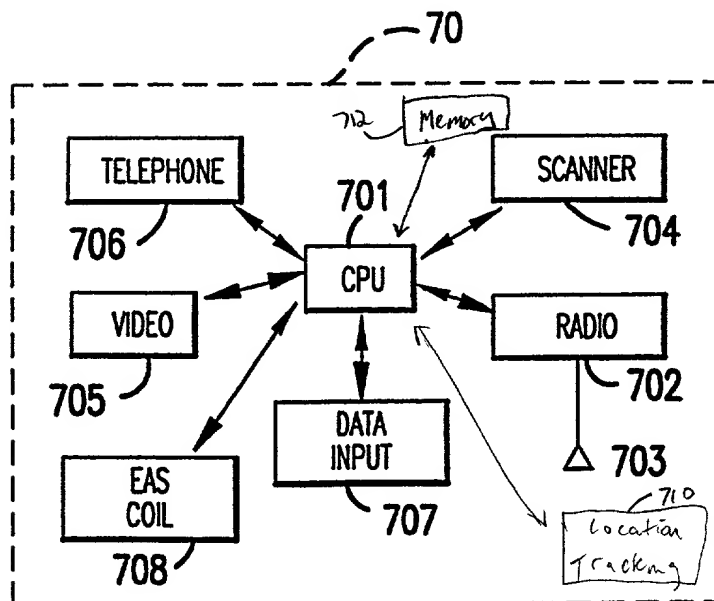


FIG. 3

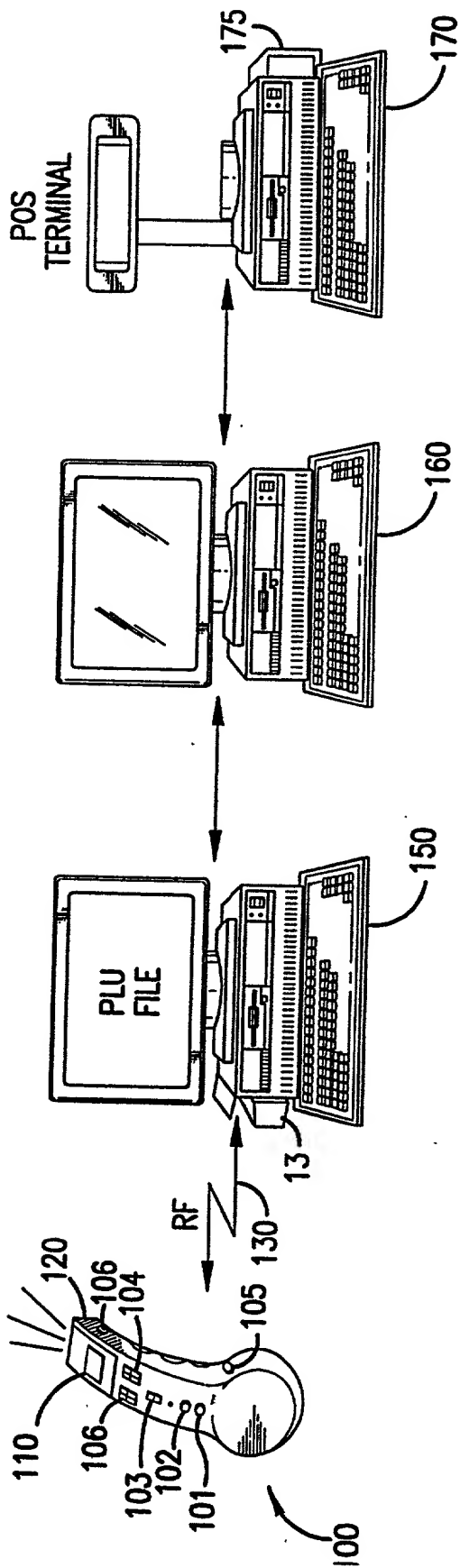


FIG. 4

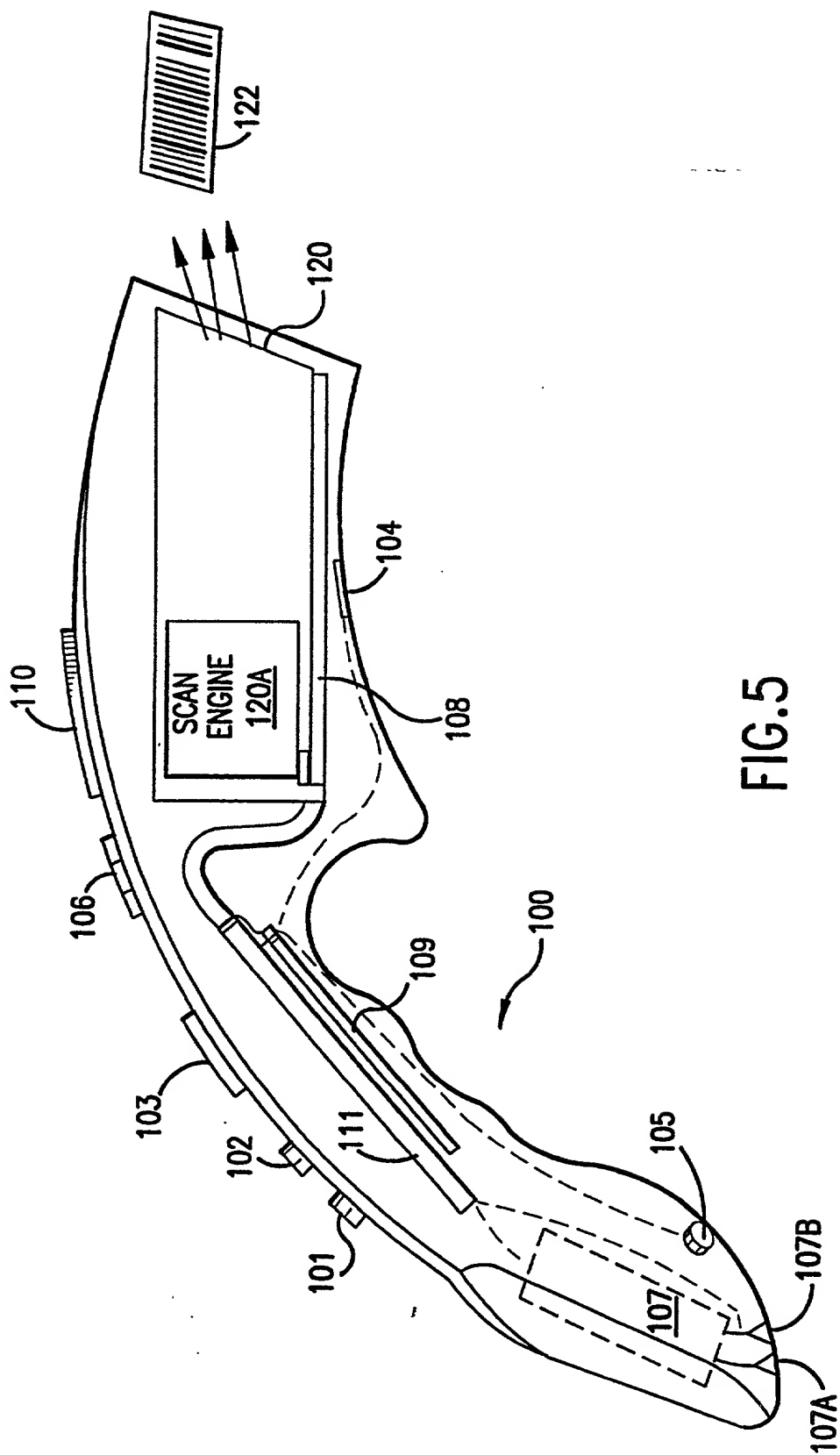


FIG. 5

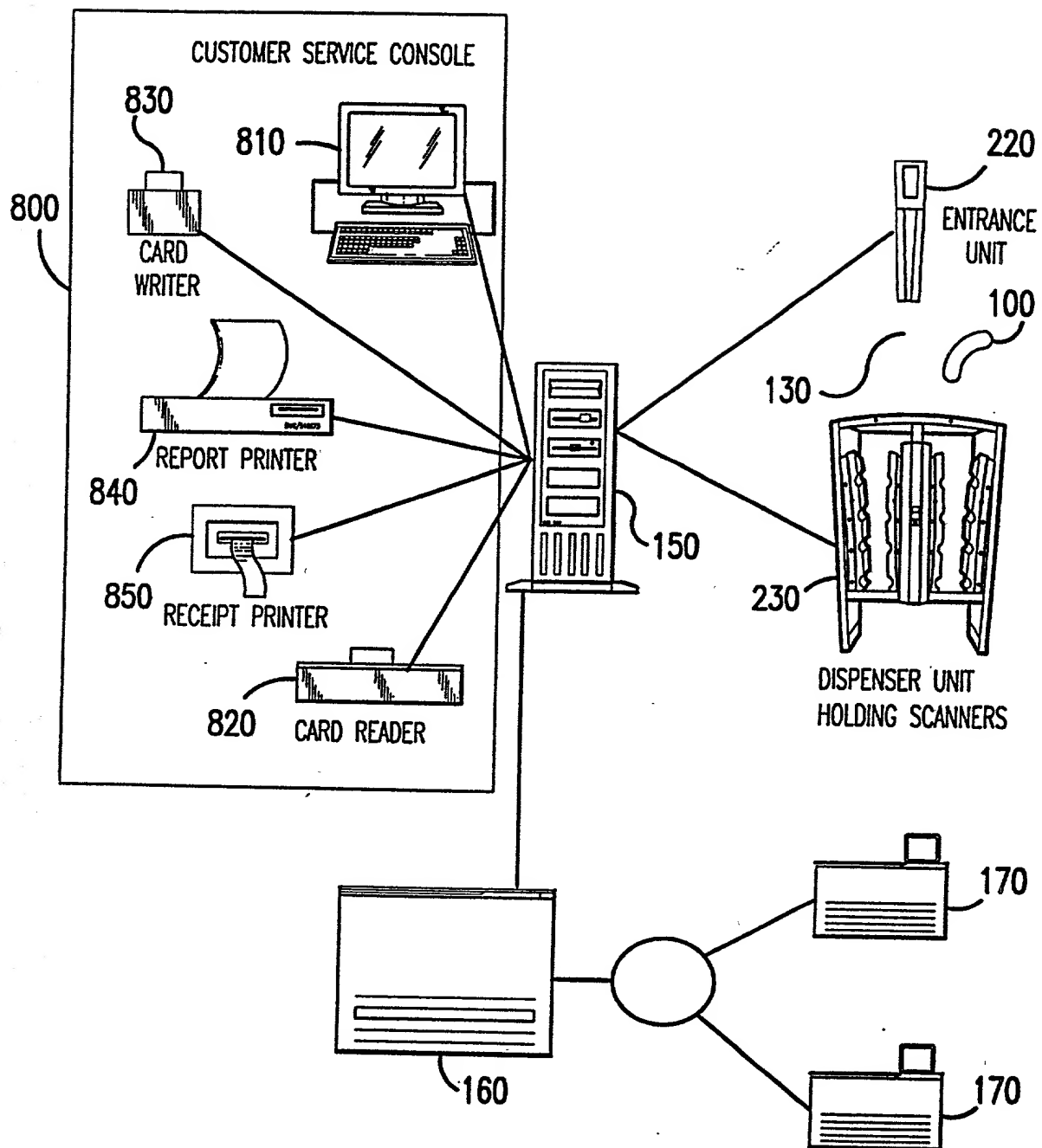


FIG.6

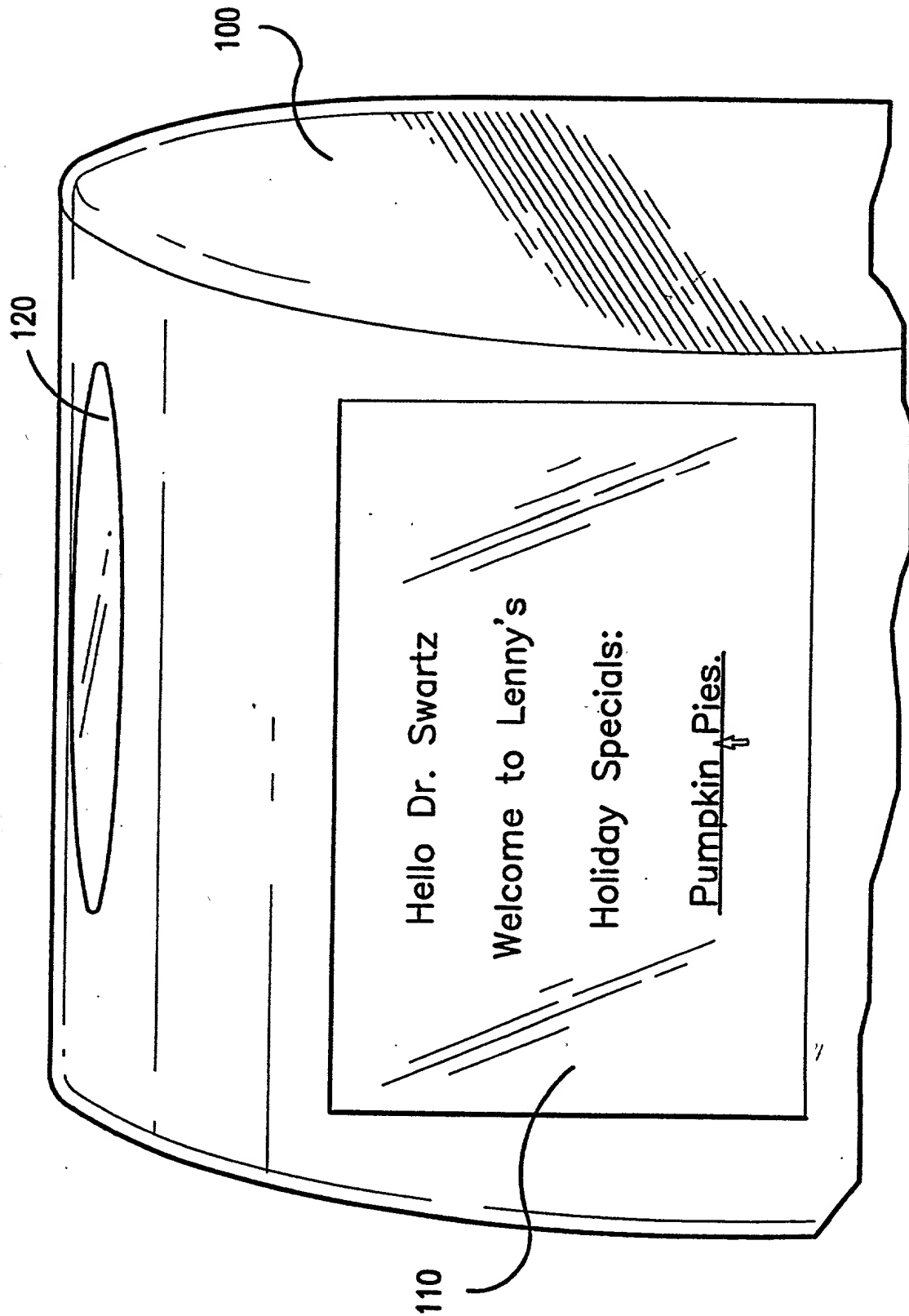


FIG. 7A

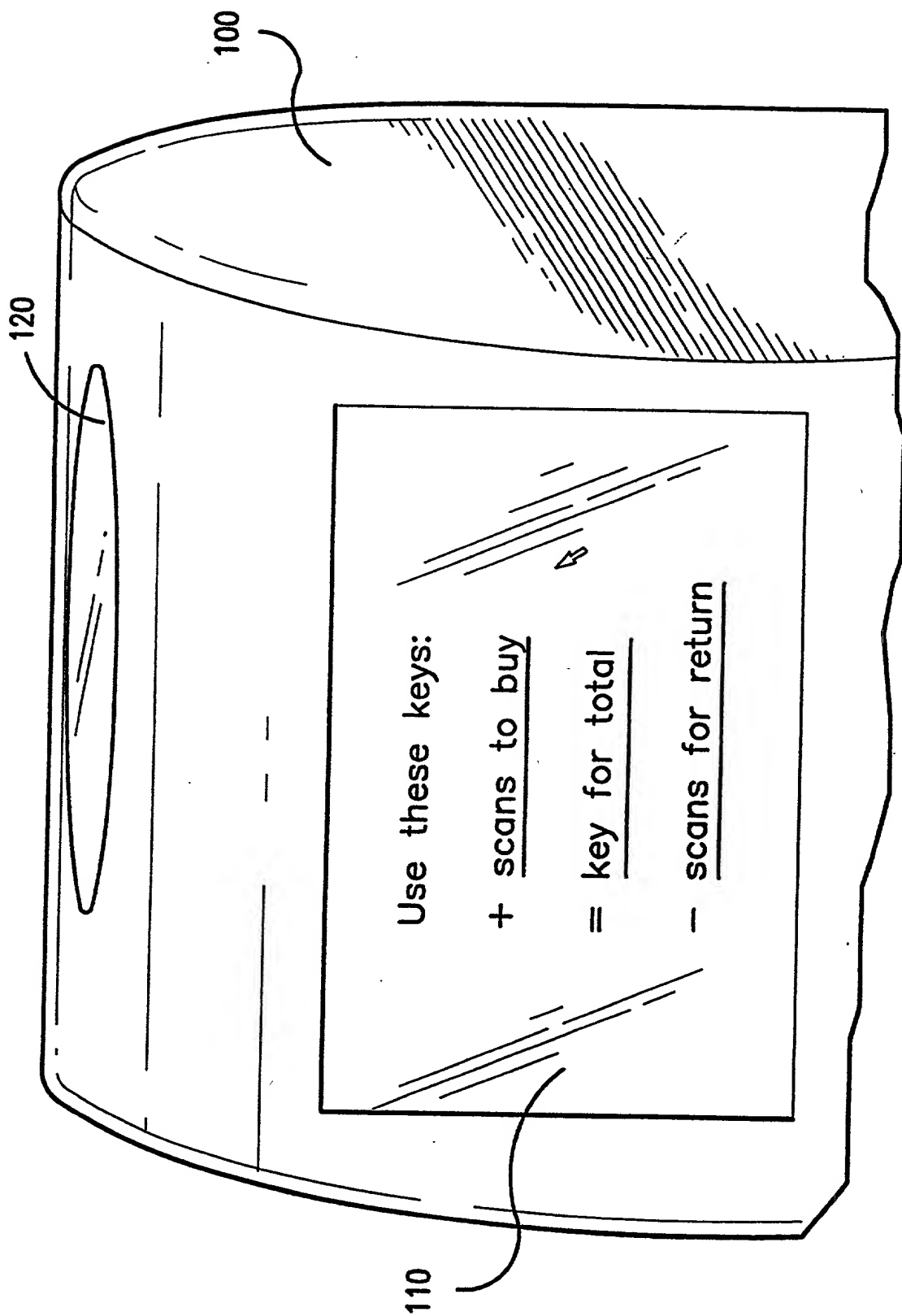


FIG. 7B



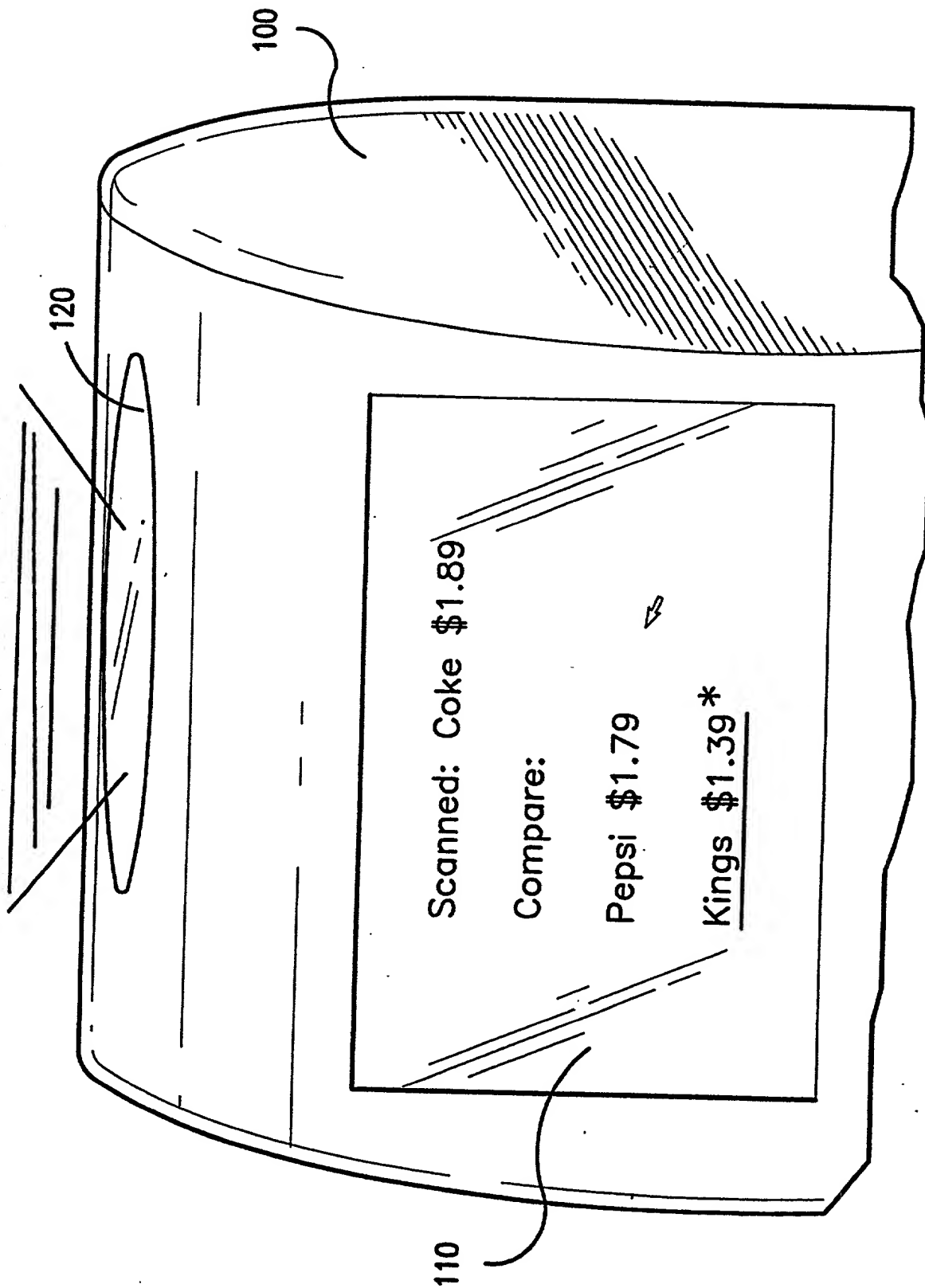


FIG. 7C

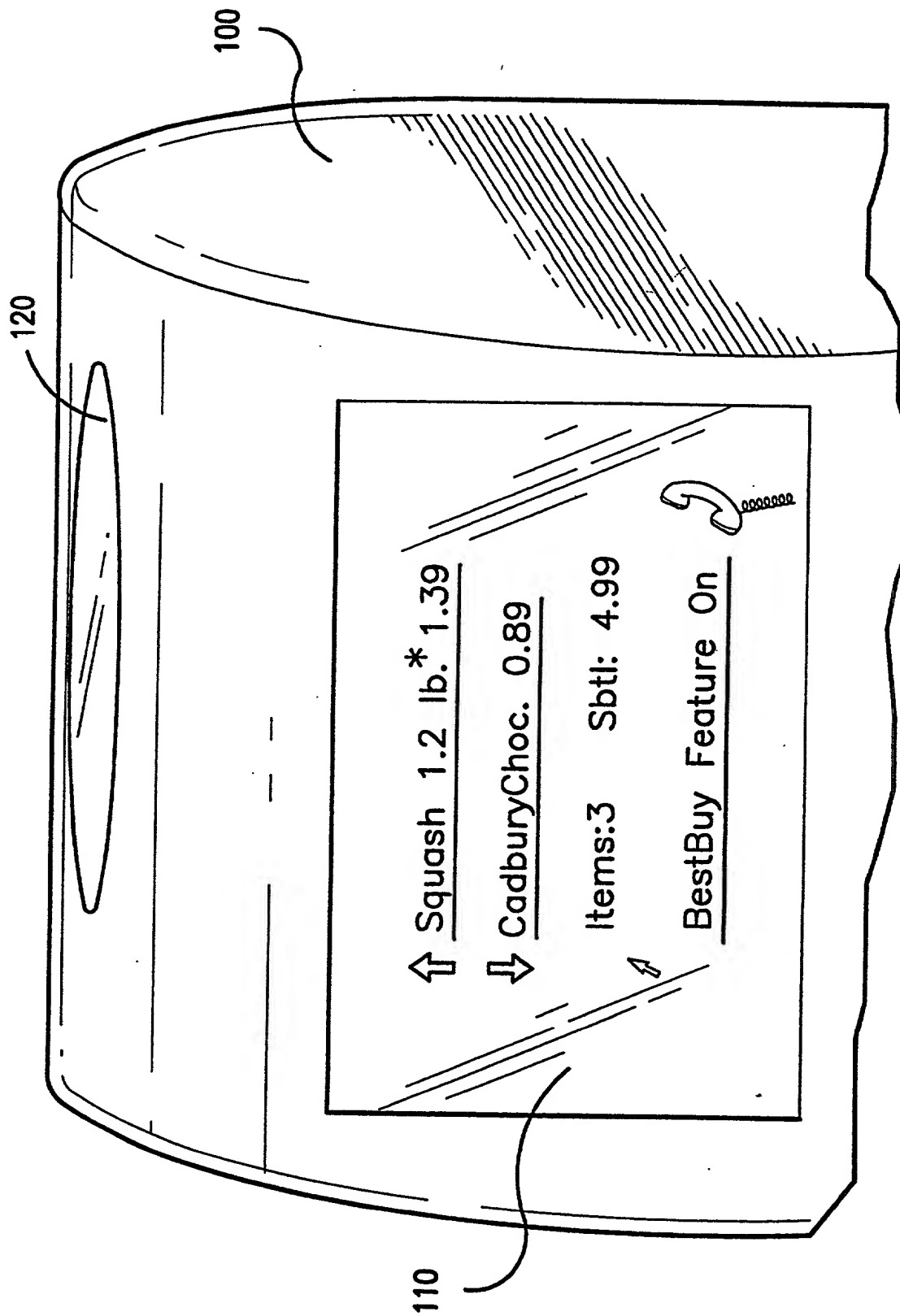


FIG. 7D

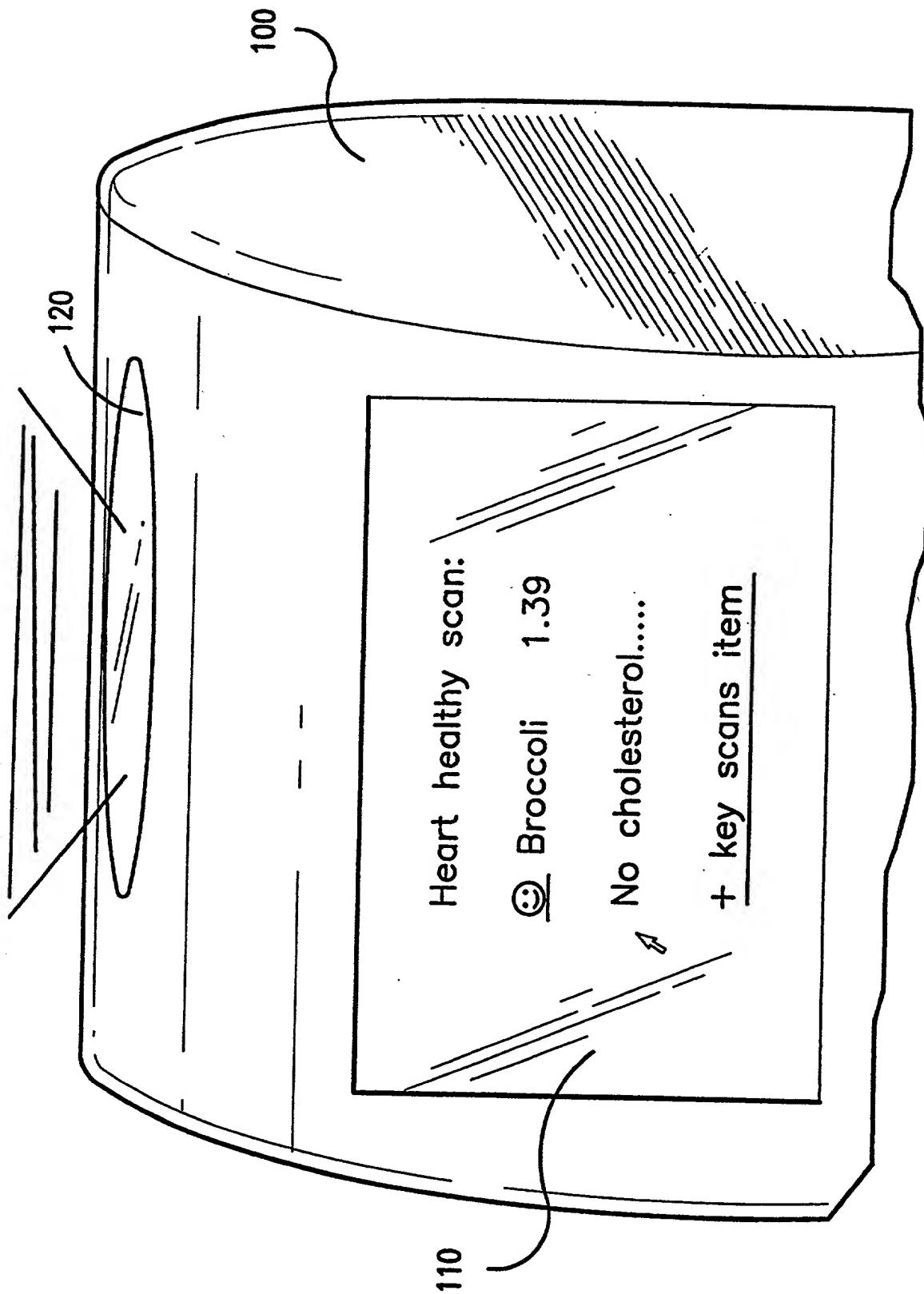


FIG. 7E

0990597-12401

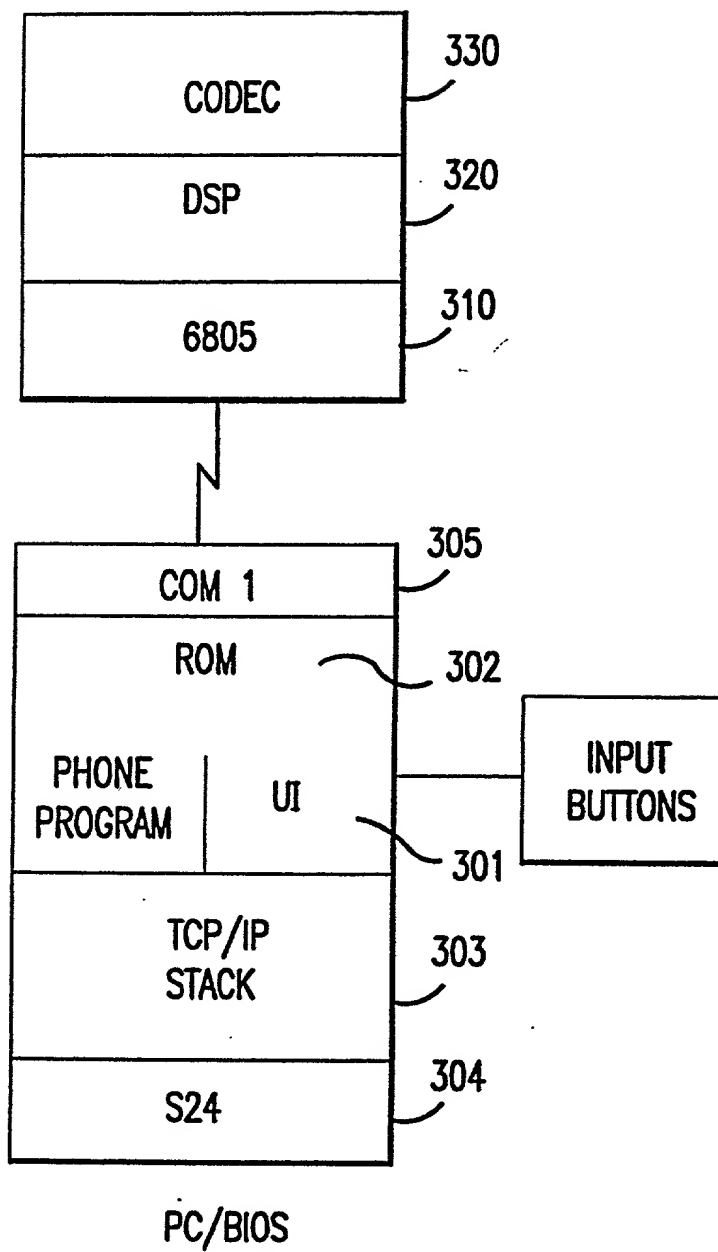


FIG.8 A

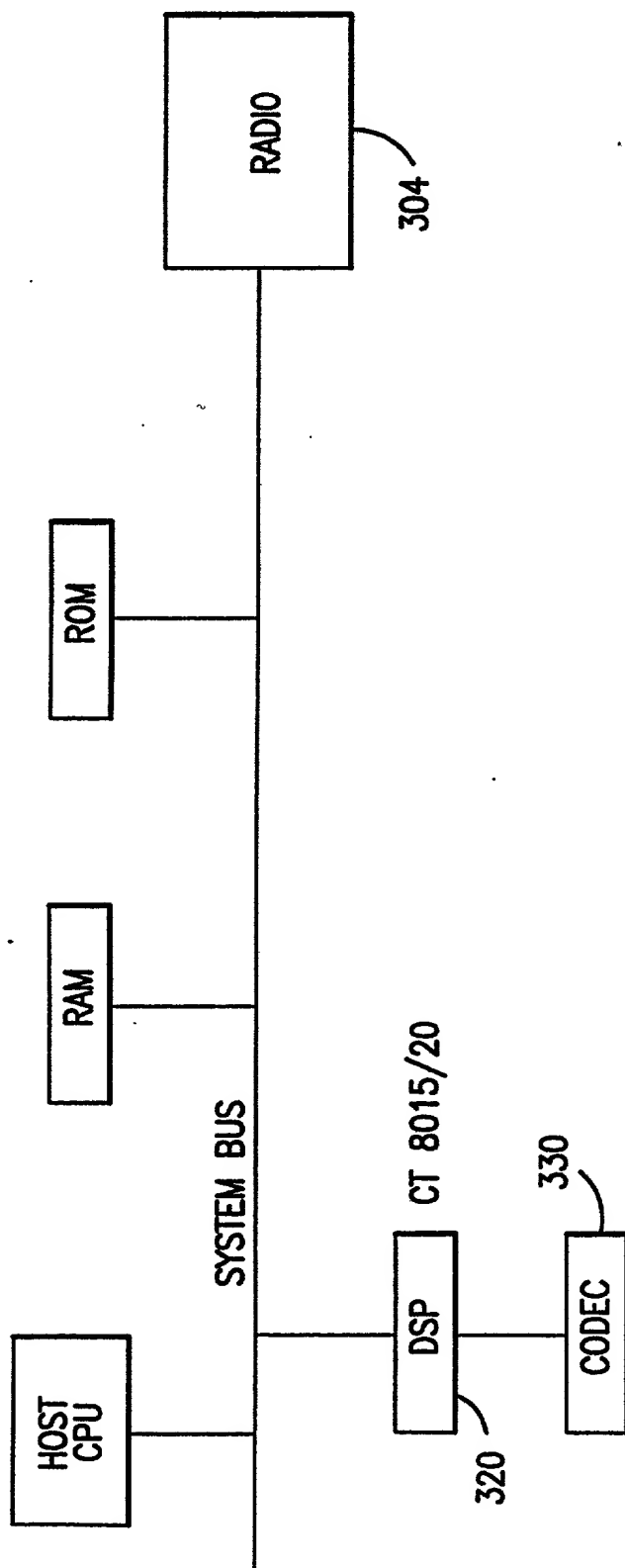


FIG. 8B

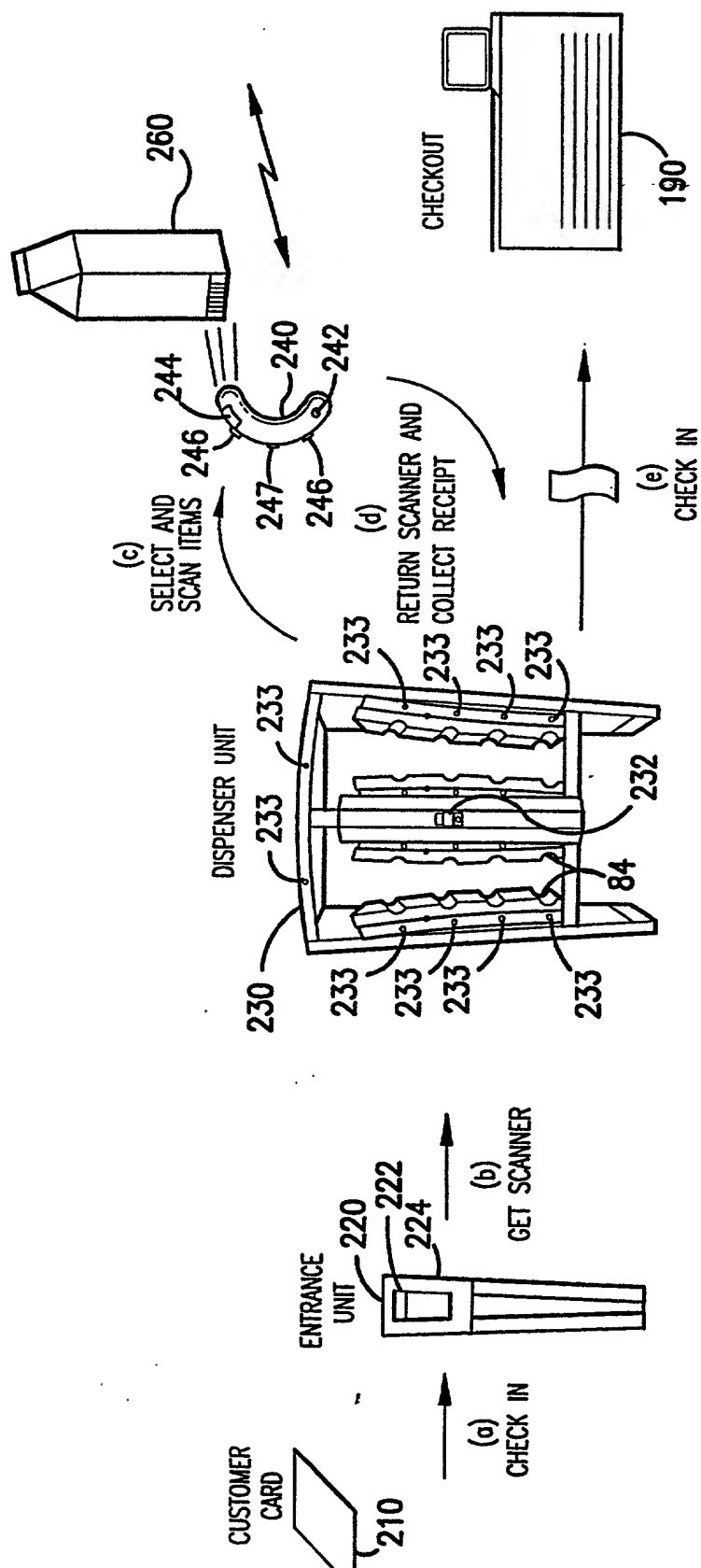


FIG. 9

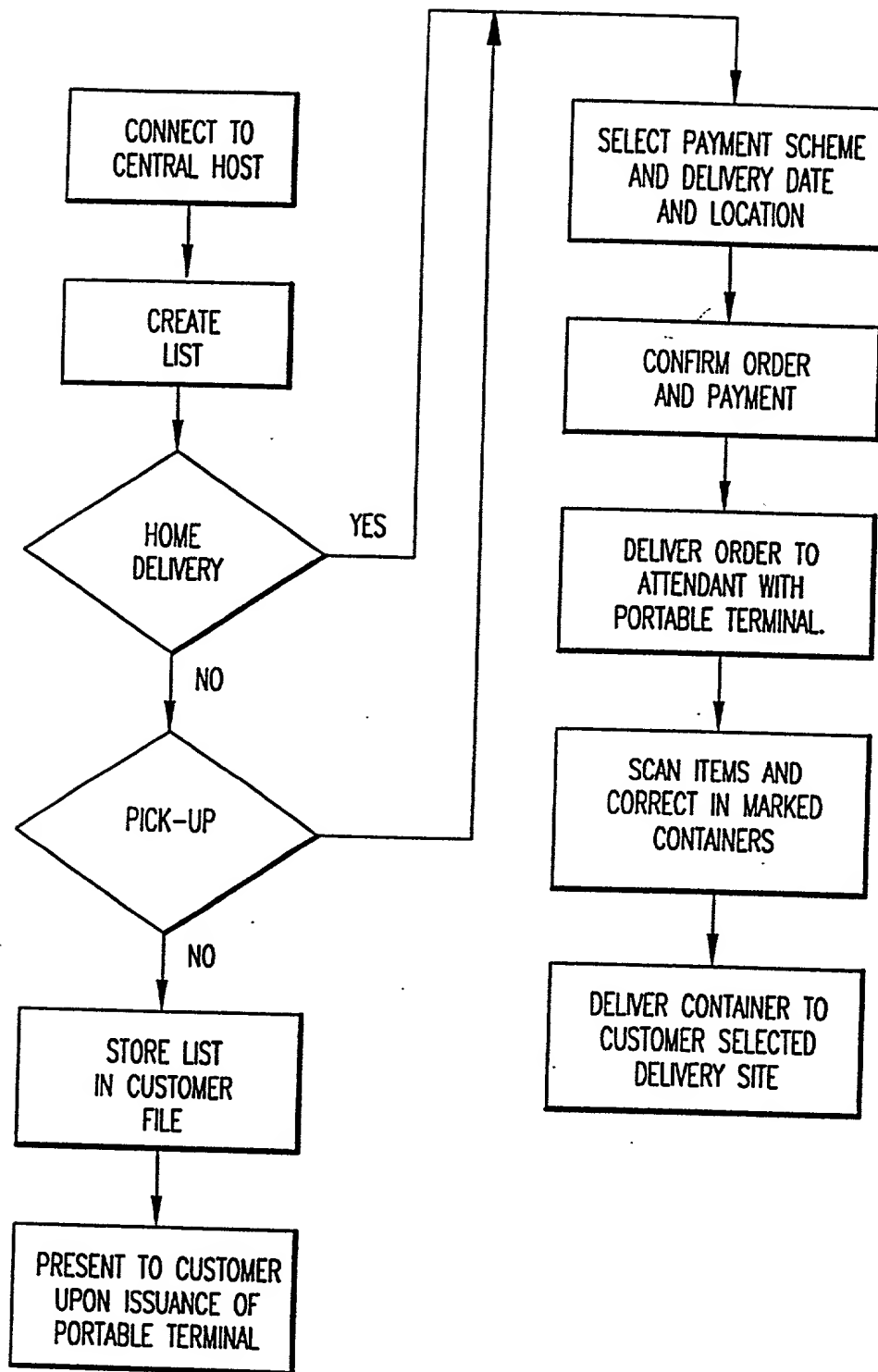


FIG.10

0990597-12101

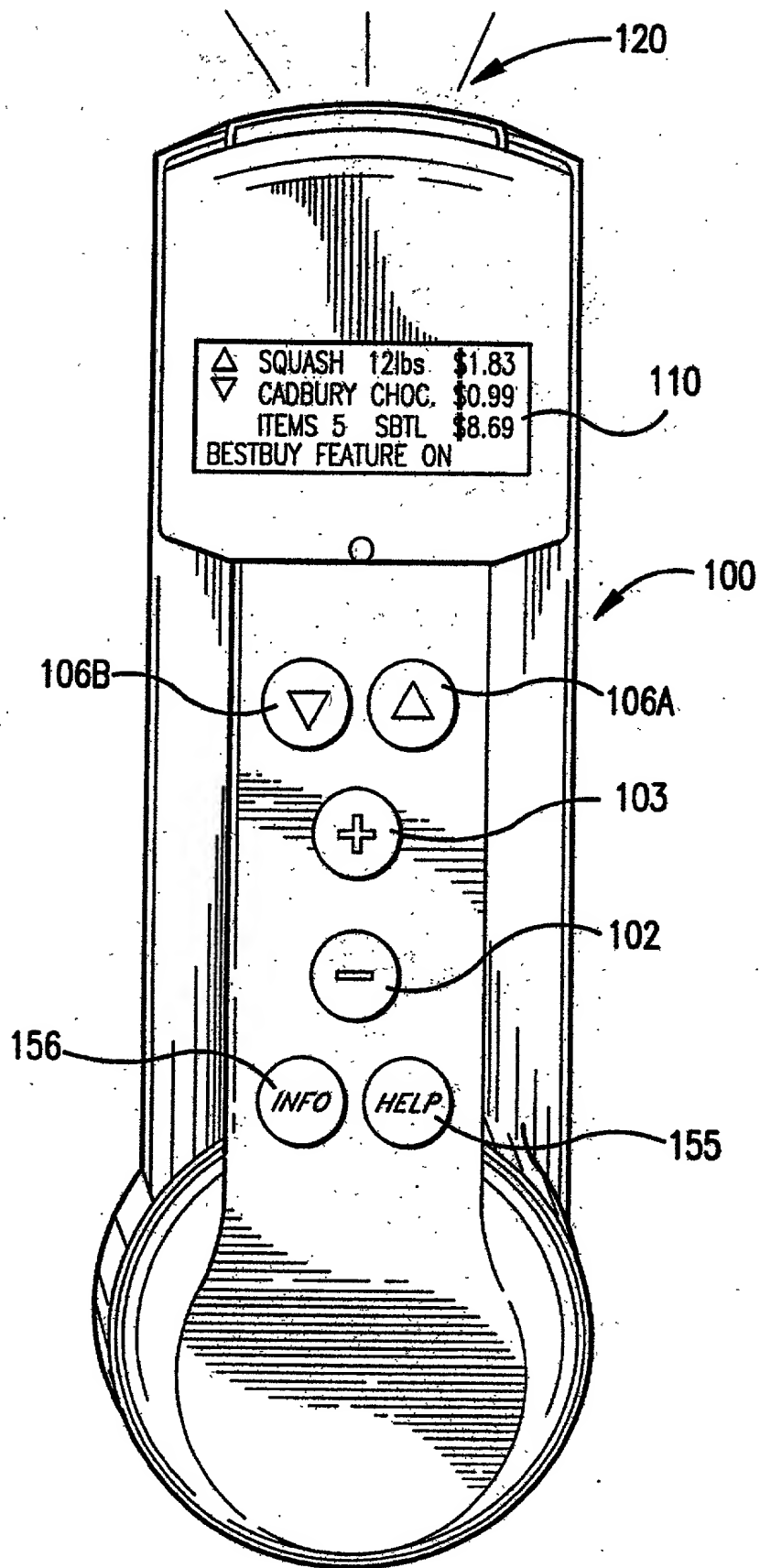


FIG. 11



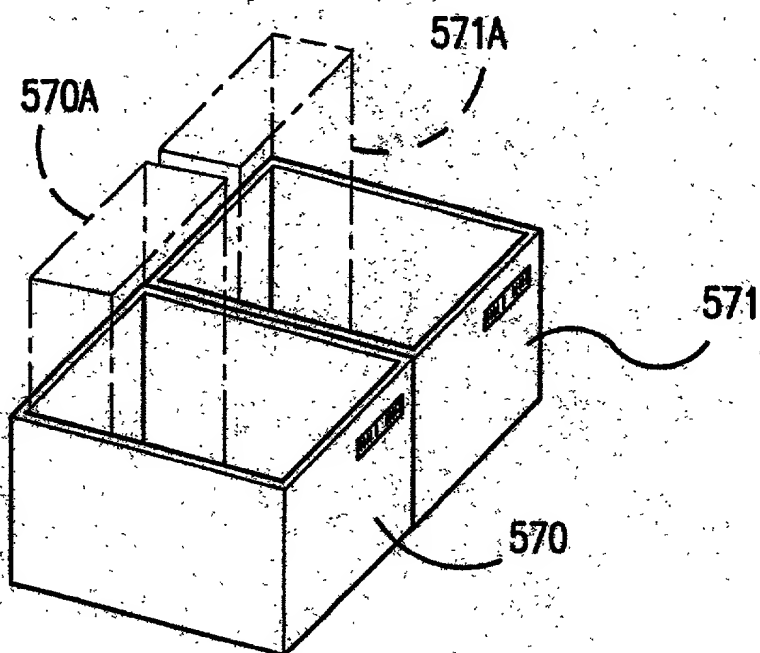
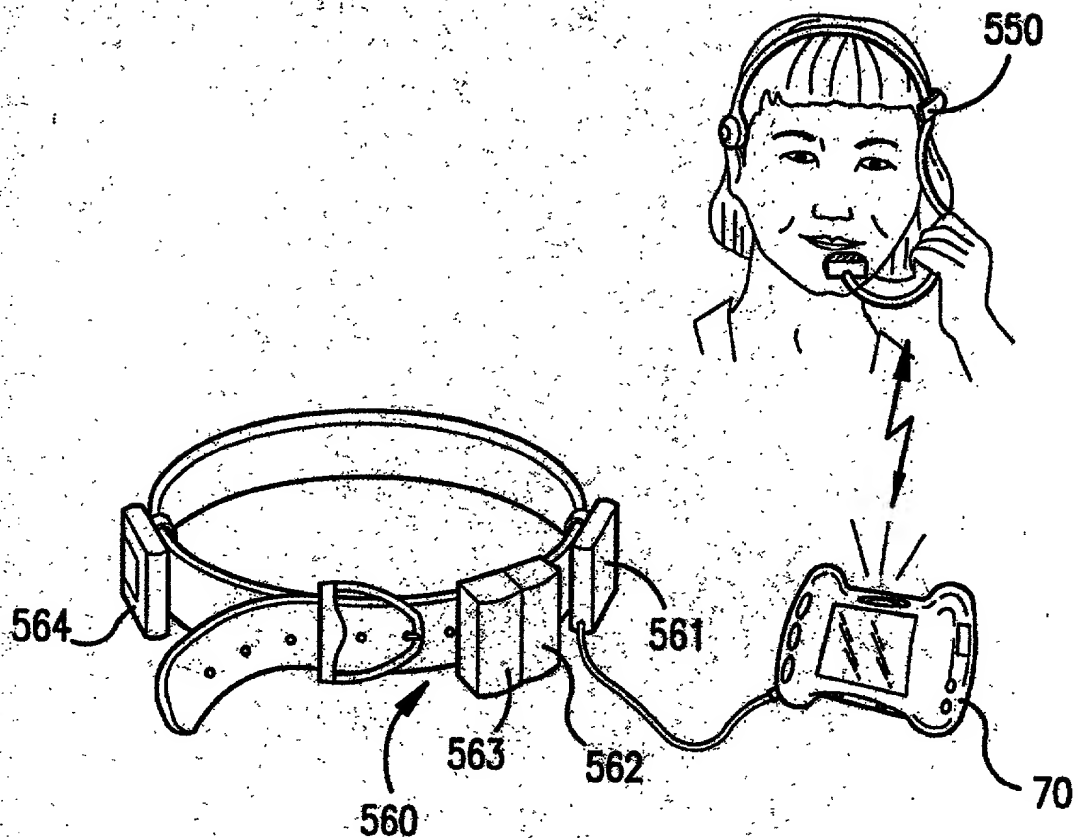


FIG.12

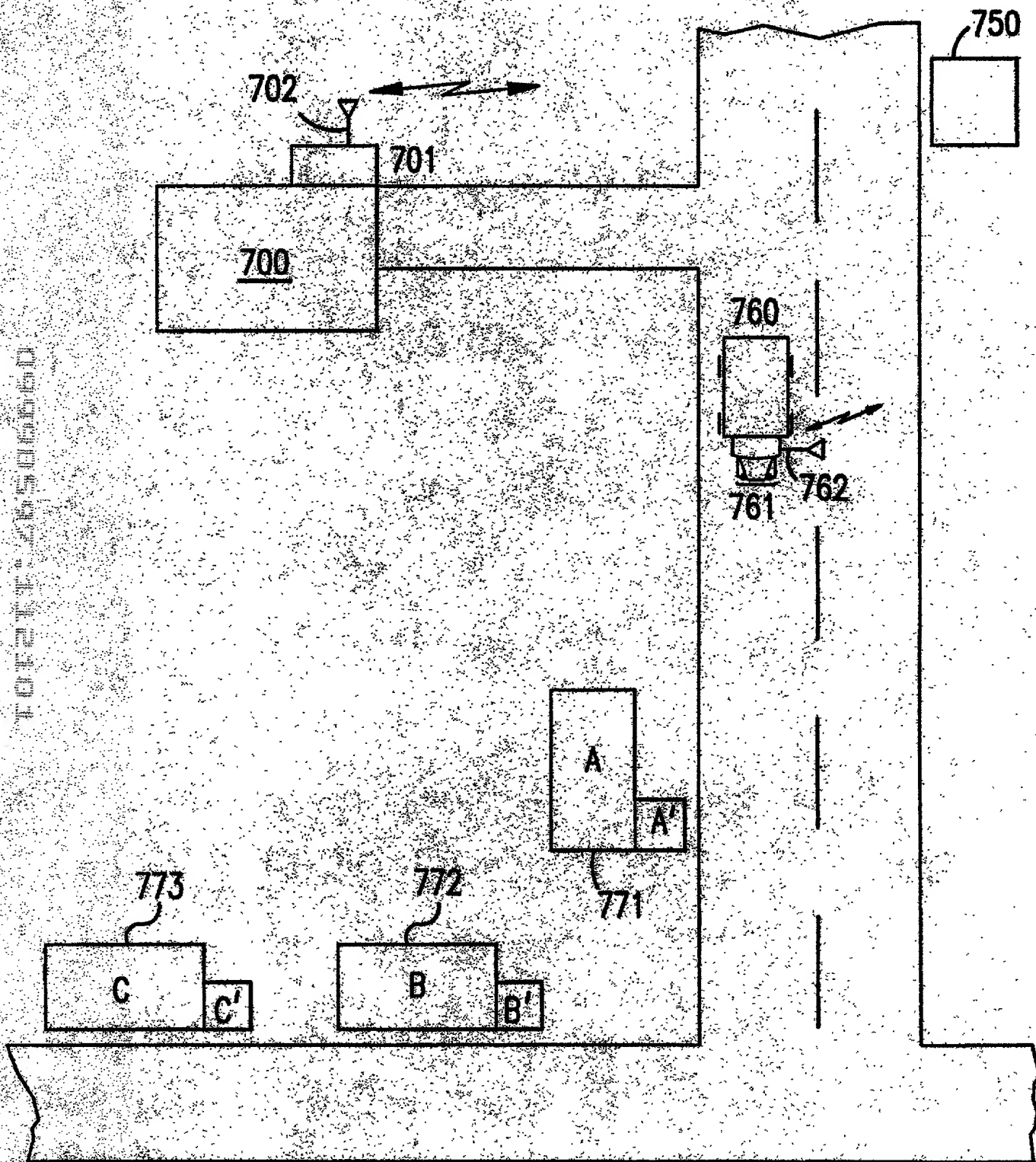
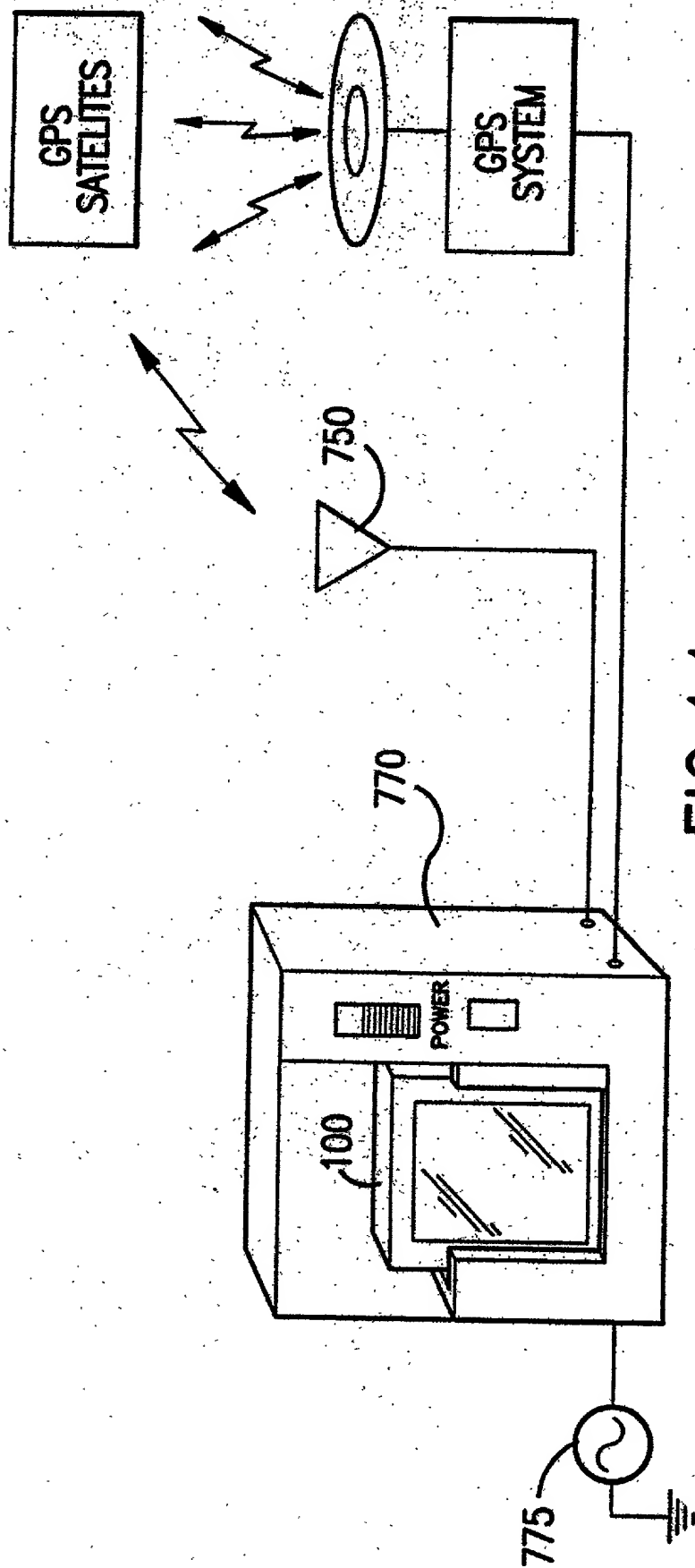


FIG. 13



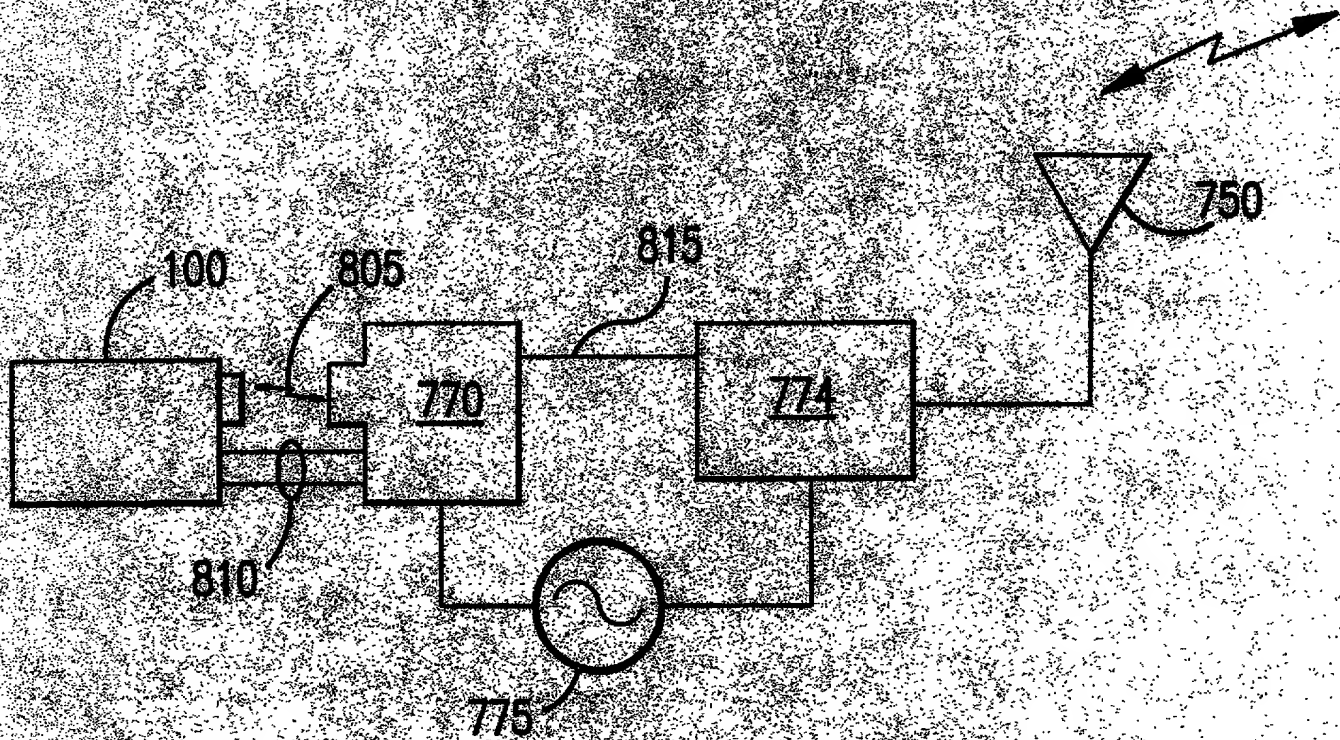


FIG.15

Figure 16

902 /	904 /	906 /	908 /	910 /	912 /	914 /	916 /
Product ID	General Type	Characteristics	Nutritional Value	Uses	Advertisements	Expiration	Replenishment
0001 (2 lbs Zorro Pretzels)	Snack	Family size	0 fat/serv., 0 cholesterol, 45 Carbs./serv., 4 protein/serv.	Party, snacks	In circular	18 months	4
0002 (1 liter Store Brand cola)	Beverage	Caffeine free, good profit margin	0 fat/serv., 100 carbs/serv., 0 protein/serv.	Party, dinner	TV commercial	18 months	2
0003 (30 gal. garbage bags)	House wares	High profit margin	N/A	Staple, parties cleaning	In newspaper	N/A	6
0004 (Piggy Brand Sausage)	Meat	High fat product	22 fat/ serv., 30 carbs/serv., 40 protein/serv.	Dinner, barbeque	No ads in last 4 weeks	1 week	6
0005 (blueberries)	Fruit	High profit margin	0 fat/serv., 10 carbs/serv., 1 protein/serv.	Snacks, pancakes, blueberry pie	In circular	5 days	6
0006 (Zap Brand Greeting card)	Stationery	Birthday card, High profit margin	N/A	Party	No ads in last 4 weeks	N/A	5

Figure 17

902 /	918 /	920 /	922 /	924 /	926 /	928 /	930 /
Product ID	Price	Profit	Expense Factor	Available Promotions	Location	Inventory	Next Shipment
0001 (2 lbs Zorro Pretzels)	\$3.99	\$ .75	2	.35 discount	Aisle 10, section 5, shelf 3	52	In 48 hours
0002 (1 liter Store Brand cola)	\$ .95	\$ .15	3	none	Aisle 10, section 4, shelf 3	67	In 5 days
0003 (30 gal. garbage bags)	\$3.95	\$1.00	1	.50 discount	Aisle 11, section 3, shelf 4	39	In 7 days
0004 (Piggy Brand Sausage)	\$4.92	\$ .50	4	none	Aisle 3, section 5, shelf N/A	35	In 5 days
0005 (blueberries)	\$3.00	\$1.00	8	\$ .25	Aisle 1, section 5, shelf N/A	122	In 6 hours
0006 (Zap Brand Greeting card)	\$3.50	\$1.50	1	none	Aisle 12, section 3, shelf 3	22	In 2 weeks

Figure 18

Product ID	902 /	932 /	934 /	936 /	938 /	940 /
Product ID	Nutritional Alternatives	Competitive Alternatives	Substitutes	Complementary Products	Products in the Area	
0001 (2 lbs Zorro Pretzels)	0028 (Zorro, No salt pretzels)	0023 (Store brand pretzels), 0024 (Wise Guy brand pretzels)	0025 (Zorro potato chips), 0027 (Store brand popcorn)	Soda, beer, potato chips, popcorn	0023, 0024, 0025, 0027, 0028, 0002, 0012, 0014, 0015, 0016	
0002 (1 liter Store Brand cola)	0012 (Store brand diet cola), 0013 (Store brand juice)	0014 (Tony's Brand Cola), 0015 (Acne brand cola)	0016 (Pop's brand root beer)	Straws, Frozen pizza	0023, 0024, 0025, 0027, 0028, 0002, 0012, 0014, 0015, 0016	
0003 (30 gal. garbage bags)	N/A	0044 (Store brand bags)	0048 (garbage container)	Window cleaner, tile cleaner, air freshener	0045 (sandwich bags), 0049 (air freshener)	
0004 (Piggy Brand Sausage)	0050 (Acne Turkey sausage)	0055 (Store brand sausage)	0057 (ground beef)	Peppers, Italian bread	0050, 0055, 0057, 0058 (poultry)	
0005 (blueberries)	None	None	0062 (raspberries), 0064 (strawberries)	Sugar, flour	0062, 0064	
0006 (Zap Brand Greeting card)	N/A	0072 (Acne brand cards)	0078 (stationary)	Gifts, birthday candles	0074 (magazines)	

**Figure 19**

Customer ID Number 10-0001:

Shopping Visit:	6/16/01
Start of Visit:	10:15 am
End of Visit:	10:58 am
Total items:	65
Total cost:	\$87.32
Products purchased:	0002, 0006, 0050, ... 1234
Shopping Visit:	6/23/01
Start of Visit:	9:15 am
End of Visit:	9:45 am
Total items:	37
Total cost:	\$55.52
Products purchased:	0002, 0016, 0058, ... 1234
Shopping Visit:	6/30/01
Start of Visit:	1:00 pm
End of Visit:	1:18 pm
Total items:	15
Total cost:	\$47.62
Products purchased:	0002, 0005, 0050, ... 1234
Shopping Visit:	7/7/01
Start of Visit:	10:13 am
End of Visit:	11:10 am
Total items:	75
Total cost:	\$97.42
Products purchased:	0002, 0006, 0058, ... 1234



Figure 20

Customer ID Number 10-0001

Products Purchased	Linked Products	Price Sensitivity Factor	Replenishment Frequency	Date of visit	958 /	958 /	958 /	958 /	958 /
0002	N/A	1	1	6/16/01	958 /	958 /	958 /	958 /	958 /
0005	0045, 0067, 0072, 0089, 0139, 0202	5	7	--	958 /	958 /	958 /	958 /	958 /
0006	0090	2	3	6/16/01	958 /	958 /	958 /	958 /	958 /
0016	N/A	4	4	--	958 /	958 /	958 /	958 /	958 /
0050	N/A	3	3	6/16/01	958 /	958 /	958 /	958 /	958 /
0058	0016	3	3	--	958 /	958 /	958 /	958 /	958 /

Figure 21

Customer ID Number 10-0001

Visit: 6/16/01

Product Purchased	Product selection order	Discount available for product?	Discount applied to product?	Discount available on competing product?
0002	4/65	No	N/A	Yes
0006	45/65	Yes	Yes	No
0050	39/65	Yes	No	No